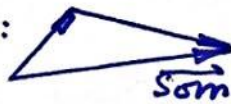
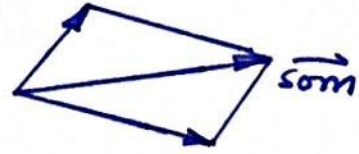


* vectoren optellen

kop/staart:

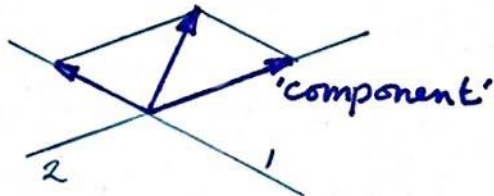


parallelogram:

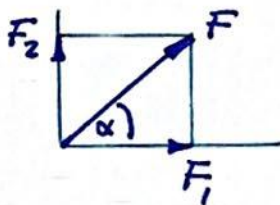


* vectoren ontbinden

in richting 1 en 2



Als 1 en 2 loodrecht op elkaar:



$$\sin \alpha = F_2 / F$$

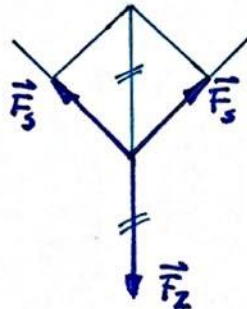
$$F_1^2 + F_2^2 = F^2$$

$$\cos \alpha = F_1 / F$$

$$\tan \alpha = F_2 / F_1$$

Als 1 en 2

symmetrisch:



evenwicht

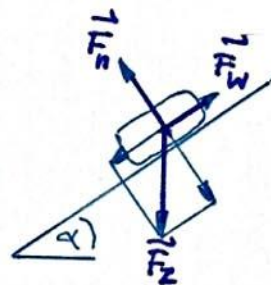
* Teken alle krachten (maak het 'vrij')

vb hellend vlak

evenwicht als:

$$F_n = F_z \cos \alpha$$

$$F_w = F_z \sin \alpha$$



NB Eentouw kan alleen trekken

Een glad vlak kan alleen dwars duwen